

REMARKS

Claims 1-41 and 49-56 are pending, with claims 1, 7, 10, 23, 34, 39, 49, and 51 being independent. Claims 1-6, 10-23, 26-30, 34-38, and 49-56 are under consideration as being directed to elected Invention I, with claims 1-6, 10-22, 34-38, 49, 50, and 52-56 being readable on elected Species A; claim 51 being generic to elected Species A and non-elected Species B; claims 26-30 of Species B being linking claims that link together the inventions of Species A and B; and claim 23 of Species B being the base claim of linking claims 26-30. Claims 7-9, 24, 25, 31-33, and 39-41 are withdrawn from consideration as being directed to elected invention I but being readable on non-elected Species B. Claims 4-6, 12-14, 17-22, 36-38, and 50 of Species A are linking claims that link together the inventions of Species A and B.

Applicants' Statement of Substance of Interviews

The Interview Summary mailed on October 31, 2007, for the telephone interview conducted on October 4, 2007, and the Interview Summary mailed on November 21, 2007, for the telephone interview conducted on October 29, 2007, are acknowledged. Copies of the Interview Summary for the interview of October 4, 2007, were previously faxed to the undersigned attorney on October 4, 2007, and mailed on October 11, 2007. A copy of the Interview Summary for the interview of October 29, 2007, was previously faxed to the undersigned attorney on October 29, 2007.

The applicants' statement of the substance of the interviews of October 4 and 29, 2007, required by MPEP 713.04 has already been provided in the Applicants' Statement of Substance of Interviews filed on October 30, 2007.

Claim Rejections Under 35 USC 102

Claims 1-6, 10-23, 26-30, 34-38, and 49-56 have been rejected under 35 USC 102(b) as being anticipated by Himeshima et al. (Himeshima) (U.S. Patent No. 6,469,439). This rejection is respectfully traversed.

Independent Claim 1

It is submitted that Himeshima does not disclose "at least one mask unit, comprising: a plurality of main apertures, and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask" as recited in independent claim 1.

The Examiner states as follows:

Regarding claim 1, Himeshima discloses an evaporation mask (item 31) formed of a thin film in figures 35 and 36, wherein the evaporation mask is drawn taut by application of tension (item 22) and comprises: at least one mask unit (area around item 32), comprising: a plurality of main apertures (item 32), and a plurality of first dummy apertures (item 32) formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask.

The Examiner considers the apertures 32 in FIGS. 35 and 36 of Himeshima to correspond to both the main apertures and the first dummy apertures recited in claim 1, but has not explained which of the apertures 32 she considers to correspond to the main apertures, and which of the apertures 32 she considers to correspond to the first dummy apertures, which makes it impossible for the applicants to respond to the rejection without speculating about how the Examiner is interpreting Himeshima, thereby prejudicing the applicants.

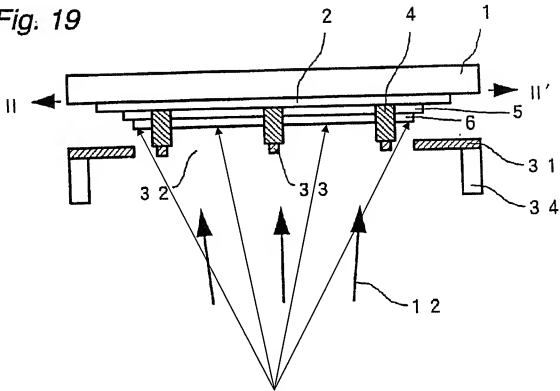
Accordingly, should the Examiner repeat the rejection, it is respectfully requested that the Examiner provide marked-up copies of FIGS. 35 and 36 of Himeshima showing which of the apertures 32 she considers to correspond to the main apertures recited in claim 1, and which of the apertures 32 she considers to correspond to the first dummy apertures recited in claim 1.

Furthermore, FIGS. 35 and 36 relate to two different masks, and it is not clear from the explanation of the rejection whether the Examiner realizes this is the case. FIG. 35 shows a method of making a mask for patterning the emitting layer 6 shown in FIGS. 1-3 of Himeshima, while FIG. 36 shows a method of making a mask for patterning the second electrodes 8 shown in FIGS. 1-3 of Himeshima.

FIGS. 17-19 of Himeshima show the method of patterning the emitting layer 6 using the mask shown in FIG. 35 of Himeshima. As can be seen from the following marked-up copy of FIG. 19, the luminescent material 12 is deposited on Himeshima's organic electroluminescent

device through all of the apertures 32 in the mask shown in FIGS. 17 and 35 to pattern the emitting layer 6:

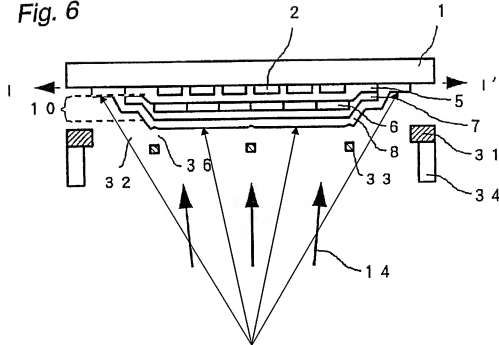
Fig. 19



Luminescent material 12 deposited through all apertures 32 to pattern emitting layer 6

FIGS. 4-7 of Himeshima show the method of patterning the second electrodes 8 using the mask shown in FIG. 36 of Himeshima. As can be seen from the following marked-up copy of FIG. 6, the second electrode material 14 is deposited on Himeshima's organic electroluminescent device through all of the apertures 32 in the mask shown in FIGS. 4 and 36 to pattern the second electrodes 8:

Fig. 6



Second electrode material 14 deposited through all apertures 32 to pattern second electrodes 8

It is not seen where anything whatsoever in Himeshima indicates that Himeshima considers there to be any differences between any of the areas of the luminescent material 12 that are deposited through the apertures 32 using the mask shown in FIGS. 17 and 35, or between any of the areas of the second electrode material 14 that are deposited through the apertures 32 of the mask shown in FIGS. 4 and 36. Accordingly, it is submitted that there is no basis whatsoever in Himeshima for the Examiner's position that some of the apertures 32 correspond to the main apertures recited in claim 1, while others of the apertures 32 correspond to the first dummy apertures recited in claim 1. Rather, it appears that the Examiner has arbitrarily denoted some of the apertures 32 as main apertures and others of the apertures 32 as first dummy apertures based solely on the language of claim 1, such that the Examiner's position is based solely on an impermissible hindsight reconstruction of the invention.

It is submitted that the Examiner cannot simply ignore the fact that claim 1 recites two different types of apertures, i.e., main apertures and first dummy apertures, and that the Examiner must provide some logical basis for her determination that some of the apertures 32 correspond to the main apertures recited in claim 1, while others of the apertures 32 correspond

to the first dummy apertures recited in claim 1. Absent such a logical basis, it is submitted that the Examiner has not established a *prima facie* case of anticipation with respect to claim 1.

Dependent Claim 2

It is submitted that Himeshima does not disclose the feature "wherein the main apertures form an effective deposition area, and the first dummy apertures form an ineffective deposition area" recited in dependent claim 2.

The Examiner states "[r]egarding claim 2, Himeshima discloses the evaporation mask of claim 1, wherein the main apertures form an effective disposition area, and the first dummy apertures form an ineffective deposition area (see Abstract)." However, it is not seen where anything whatsoever in Himeshima's abstract can be considered to disclose the above feature of claim 2. Accordingly, should the Examiner repeat the rejection, it is respectfully requested that the Examiner explain why she considers Himeshima's abstract to disclose this feature of claim 2.

The only portion of Himeshima's abstract that appears to be even remotely relevant to the above feature of claim 2 is the phrase "vapor-depositing a deposit for patterning while the shadow mask having reinforcing lines formed across its apertures is kept in contact with said spacers." The "reinforcing lines" in this phrase are the elements 33 shown in FIGS. 4-6, 17, 19, 35, and 36 of Himeshima discussed above. Perhaps the Examiner considers these "reinforcing lines" to correspond to the "ineffective deposition area" recited in claim 2, or considers these "reinforcing lines" to "form an ineffective deposition area" as recited in claim 2. However, claim 2 recites that "the first dummy apertures form an ineffective deposition area," and the Examiner has taken the position that some of the apertures 32 in FIGS. 4-7, 17-19, 35, and 36 correspond to the "first dummy apertures" recited in claim 1 from which claim 2 depends. Accordingly, it is submitted that the reinforcing lines 33 cannot correspond to the "ineffective deposition area" recited in claim 2, and cannot "form an ineffective deposition area" as recited in claim 2.

Dependent Claim 3

It is submitted that Himeshima does not disclose the feature "wherein at least one of the first dummy apertures is formed parallel to the main apertures, and at least another one of the

first dummy apertures is formed perpendicular to the main apertures" recited in dependent claim 3.

The Examiner considers FIG. 35 to disclose the above feature of claim 3. However, it is not seen where FIG. 35 discloses this feature, and accordingly, absent a more detailed explanation of the rejection, it is submitted that FIG. 35 does not disclose this feature as alleged by the Examiner. Should the Examiner repeat the rejection, it is respectfully requested that the Examiner provide a marked-up copy of FIG. 35 of Himeshima showing this feature of claim 3.

Dependent Claim 4

It is submitted that Himeshima does not disclose "at least two mask units, and further comprising a plurality of second dummy apertures formed outside and adjacent to the outermost mask units in the direction in which tension is applied to the evaporation mask" as recited in dependent claim 4.

The Examiner states as follows:

Regarding claim 4, Himeshima discloses the evaporation mask of claim 2, comprising at least two mask units (area around item 32), and further comprising a plurality of second dummy apertures (32) formed outside and adjacent to the outermost mask units in the direction in which tension is applied to the evaporation mask.

By "area around item 32," the Examiner apparently means the mask portion 31 in FIGS. 35 and 36 of Himeshima in which the apertures 32 are formed. However, it is submitted that FIGS. 35 and 36 each show a single mask unit which is used in forming a single organic electroluminescent device, such that FIGS. 35 and 36 do not disclose "at least two mask units" as recited in claim 4. Nor is it seen where any other portion of Himeshima discloses this feature of claim 4.

With respect to the "second dummy apertures" recited in claim 4, the Examiner has now taken the position that some of the apertures 32 in FIGS. 35 and 36 of Himeshima correspond to the main apertures recited in claim 1 from which claim 4 indirectly depends; that other ones of the apertures 32 correspond to the first dummy apertures recited in claim 1 from which claim 4 indirectly depends; and that still other ones of the apertures 34 correspond to the second dummy

apertures recited in claim 4. However, the Examiner has not identified which of the apertures 32 correspond to the various apertures recited in claim 4 by virtue of its dependence from claim 1. Accordingly, should the Examiner repeat the rejection, it is respectfully requested that the Examiner provide marked-up copies of FIGS. 35 and 36 of Himeshima showing which of the apertures 32 she considers to correspond to the main apertures, the first dummy apertures, and the second dummy apertures recited in claim 4 by virtue of its dependence from claim 1.

Furthermore, it is submitted that the Examiner has not provided any logical basis for her determination that various ones of the apertures 32 correspond to various ones of the apertures recited in claim 4 by virtue of its dependency from claim 1. Absent such a logical basis, it is submitted that the Examiner has not established a *prima facie* case of anticipation with respect to claim 4.

Dependent Claim 5

It is submitted that Himeshima does not disclose the feature "wherein the second dummy apertures are formed outside the effective deposition areas where the mask units are formed" recited in dependent claim 5.

The Examiner considers the abstract of Himeshima to disclose this feature of claim 5. However, it is submitted that the abstract of Himeshima does not disclose this feature of claim 5 for at least the same reasons discussed above that the abstract of Himeshima does not disclose the similar feature of claim 5.

Dependent Claim 6

It is submitted that Himeshima does not disclose the feature "wherein at least one of the second dummy apertures is formed parallel to the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures."

The Examiner considers FIG. 35 to disclose the above feature of claim 6. However, it is not seen where FIG. 35 discloses this feature, and accordingly, absent a more detailed explanation of the rejection, it is submitted that FIG. 35 does not disclose this feature as alleged

by the Examiner. Should the Examiner repeat the rejection, it is respectfully requested that the Examiner provide a marked-up copy of FIG. 35 of Himeshima showing this feature of claim 6.

Independent Claim 10

It is submitted that Himeshima does not disclose "at least one mask unit, the mask unit comprising a plurality of main apertures and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask" as recited in independent claim 10 for at least the same reasons discussed above that Himeshima does not disclose the same features of claim 1.

Furthermore, it is submitted that Himeshima does not disclose "forming a first dummy pattern area outside the effective luminescent area through the first dummy apertures" as recited in claim 10.

The Examiner states "forming a first dummy pattern area (item 32) outside the effective luminescent area through the first dummy apertures." However, the Examiner has taken the position that some of the apertures 32 correspond to the "first dummy apertures" recited in claim 10, and none of the apertures 32 are formed through any other ones of the apertures 32 as would be necessary for the Examiner's apparent position that other ones of the apertures 32 correspond to "a first dummy pattern area" as recited in claim 10 to be even remotely tenable.

Furthermore, it is submitted that there is no basis whatsoever in Himeshima for any of the areas of the luminescent material 12 that are formed through the apertures 32 as shown in the above marked-up copy of FIG. 19 of Himeshima, or any of the areas of the second electrode material 14 that are formed through the apertures 32 as shown in the above marked-up copy of FIG. 6 of Himeshima, to be considered to be "a first dummy pattern area" as recited in claim 10.

Dependent Claim 12

It is submitted that Himeshima does not disclose the feature "wherein at least two organic EL devices are manufactured in a single process" recited in dependent claim 12.

The Examiner considers the abstract of Himeshima to disclose the above feature of claim 12. However, the abstract of Himeshima discloses "producing an organic

electroluminescent device." Nor does any other portion of Himeshima disclose the above feature of claim 12.

Dependent claim 15

It is submitted that Himeshima does not disclose "a second dummy pattern area is formed outside the effective luminescent area through the first dummy apertures" as recited in dependent claim 15 for at least the same reasons discussed above that Himeshima does not disclose the similar feature of claim 10.

Independent claim 23

It is submitted that Himeshima does not disclose "at least two mask units each comprising a plurality of main apertures and a plurality of second dummy apertures formed outside and adjacent to outermost ones of the mask units in a direction in which tension is applied to the evaporation mask" as recited in independent claim 23 for at least the same reasons discussed above that Himeshima does not disclose the same features of claim 4.

Independent claim 34

It is submitted that Himeshima does not disclose "a plurality of main apertures and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask" as recited in independent claim 34 for at least the same reasons discussed above that Himeshima does not disclose or suggest the same features of claim 1.

Independent Claim 49

It is submitted that Himeshima does not disclose "at least one mask unit comprising: at least one main aperture, and at least one first dummy aperture formed adjacent to an outermost at least one main aperture in a direction in which tension is applied to the evaporation mask" as

recited in independent claim 49 for at least the same reasons discussed above that Himeshima does not disclose the similar features of claim 1.

Independent claim 51

It is submitted that Himeshima does not disclose "[a] mask unit for an evaporation mask, comprising: a main aperture; and a dummy aperture" as recited in independent claim 51 for at least the same reasons discussed above that Himeshima does not disclose the similar features of claim 1.

It is submitted that Himeshima does not disclose the feature "wherein the dummy aperture prevents the main aperture from being deformed by tension applied to the evaporation mask" recited in claim 51.

The Examiner states "[r]egarding claim 51, Himeshima discloses a mask unit for an evaporation mask in figure 35, comprising: a main aperture (item 32); and a dummy aperture (item 32); wherein the dummy aperture prevents the main aperture from being deformed by tension (item 22) applied to the evaporation mask." However, in the mask in FIG. 35, it is the reinforcing lines 33 that prevent the apertures 32 from being deformed, rather than one of the apertures 32 as alleged by the Examiner. See column 11, lines 41-43; column 12, lines 55-58; and column 22, lines 9-12, of Himeshima.

Dependent Claim 52

It is submitted that Himeshima does not disclose the feature "wherein a length of each of the first dummy apertures is equal to a length of each of the main apertures" recited in dependent claim 52.

The Examiner considers FIG. 35 of Himeshima to disclose the above feature of claim 52. However, it is not seen where FIG. 35 discloses this feature, particularly since the Examiner has not identified which ones of the apertures 32 in FIG. 35 she considers to correspond to the main apertures recited in claim 1 from which claim 52 depends, and which other ones of the apertures 32 she considers to correspond to the first dummy apertures recited in claim 1 from which claim 52 depends.

Dependent Claims 11, 13, 14, 16-22, 26-30, 35-38, 50, and 53-56

It is submitted that Himeshima does not disclose the features recited in dependent claims 11, 13, 14, 16-22, 26-30, 35-38, 50, and 53-56 for at least the same reasons discussed above that Himeshima does not disclose or suggest the same or similar features of claims 1-6, 10, 12, 15, 23, 34, 49, 51, and 52.

Conclusion—Claim Rejections Under 35 USC 102

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1-6, 10-23, 26-30, 34-38, and 49-56 under 35 USC 102(b) as being anticipated by Himeshima be withdrawn.

Rejoinder of the Invention of Non-Elected Species B

Since claim 51 which is generic to elected Species A and non-elected Species B is allowable for the reasons discussed above; since claims 4-6, 12-14, 17-22, 36-38, and 50 of Species A which are linking claims that link together the inventions of Species A and B are allowable for the reasons discussed above; since claims 26-30 of Species B which are linking claims that link together the inventions of Species A and B are allowable for the reasons discussed above; and since claim 23 of Species B is allowable for the reasons discussed above, it is submitted that the applicants are entitled to rejoinder of the invention of non-elected Species B pursuant to 37 CFR 1.141(a) and MPEP 821.04(a). Accordingly, it is respectfully requested that the requirement for an election of species be withdrawn, and that claims 7-9, 24, 25, 31-33, and 39-41, which are currently withdrawn from consideration as being readable on non-elected Species B, be examined on the merits.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

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By: 

Randall S. Svihla
Registration No. 56,273

1400 Eye St., NW
Suite 300
Washington, D.C. 20005
Telephone: (202) 216-9505
Facsimile: (202) 216-9510